

WE CLAIM:

1. An XDSL system comprising:  
  
an impedance matching circuit in operative communication with a transmission line and an XDSL modem associated with a subscriber premises,  
  
the impedance matching circuit including a compromise impedance providing a substantial impedance match to a plurality of common impedance characteristics of copper transmission lines.
2. The XDSL system of claim 1, wherein the compromise impedance circuit comprises a resistance of approximately 620 ohms in parallel with a series combination of a resistor of approximately 680 ohms and a capacitor of about 2200 picofarads.
3. The XDSL system of claim 1, wherein the compromise impedance has an impedance value that is approximately equal to a characteristic line impedance of the transmission line without a bridge tap.
4. The XDSL system of claim 1, wherein the compromise impedance has an impedance value that is approximately equal to a characteristic line impedance of the transmission line with a bridge tap.